



## Public Health Mōno-Gram

Tom Boo, MD, FAAFP, DTM&H  
Public Health Officer  
Phone: 760.924.1828  
[tboo@mono.ca.gov](mailto:tboo@mono.ca.gov)

Sandra Pearce, MS, RN, PHN, CNS  
Public Health Director  
Phone: 760.924.1818  
[spearce@mono.ca.gov](mailto:spearce@mono.ca.gov)

[www.monohealth.com](http://www.monohealth.com)



**Public Health**  
Prevent. Promote. Protect.

January 30, 2019

### Youth Epidemic Warrants Banning the Sale of Flavored Tobacco Products

Adolescent and child use of addictive flavored tobacco products has reached epidemic levels in our communities and across the United States. Use of e-cigarettes (vaping) by high school students nearly doubled over the past year to over one in five kids, with about one in ten middle school students also reporting current use of flavored tobacco products. Most of these kids are using flavored e-cigarettes, inhaling chemical aerosols created by heating solutions containing nicotine and flavoring agents seemingly developed for young people. With flavors such as Gummy Bear, Cotton Candy, Berry Cobbler, Cherry Crush, Vivid Vanilla and host of others, e-cigarette liquids are enticing to many youths.

Tobacco use is the leading cause of preventable disease, disability and death in the United States, and the rapid rise in use by young people, driven by use of flavored products, threatens to reverse recent progress in reducing tobacco use. Among minors, e-cigarettes are the most commonly used tobacco product today although child use of flavored cigars and smokeless tobacco (flavored snuff) is unfortunately growing also.

Flavors are an essential part of the problem: Tobacco companies have long used flavored products to entice new users because flavors improve taste and reduce harshness. Congress banned flavored cigarettes (except menthol) in 2009 because the risks to minors was clear, but the Tobacco Control Act did not address flavored cigars or e-cigarettes, which were little-known at that time. Since then the tobacco industry has effectively exploited the shortcomings of this federal law by developing countless flavored e-cigarette liquids, cigars and smokeless (spit) tobacco, all of which are more popular among children and young adults than they are with older tobacco users.

Over 80% of youth e-cigarette users say they use them “because they come in flavors I like.” A government study found that 81% of 12-17 year old kids who had used tobacco started with a flavored tobacco product (PATH, 2013-14)

Vaping is probably less harmful than smoking although e-cigarettes have not been around long enough to understand long-term health risks. One risk is crystal clear: e-cigarettes contain nicotine, which is highly addictive, and nicotine addiction too often leads to smoking.

- Eighty percent of young smokers started vaping nicotine before they smoked.
- A 2016 study found that e-cigarette users are 6 times more likely to smoke cigarettes compared to people who had never vaped nicotine. (*Pediatrics, Barrington-Trimis, et al., 2016*)\*.
- Almost all adult smokers began smoking when they were kids and close to 90% started before they were 18 years old (*CDC.gov*).

JUUL's sleek e-cigarette devices currently dominate the market. One JUUL "pod" of flavored liquid nicotine contains about the amount of nicotine in one to two packs of cigarettes (<https://www.aafp.org/patient-care/public-health/tobacco-nicotine/e-cigs.html>)

- JUUL's phenomenal recent growth mirrors the alarming rise in child and adolescent use
- Kids 15-17 years old are SIXTEEN TIMES more likely to be current JUUL users than young adults 25-34 years ( *truthinitiative.org* )
- Although JUUL liquid has a nicotine concentration about twice as high as most other e-cigarettes a study found that 63% of young JUUL users did not know that JUUL always contains nicotine ( *truthinitiative.org* )
- Products like JUUL, with higher nicotine levels, appear to pose greater risk: studies show that young people vaping high nicotine products are more likely to start smoking (*Leventhal, et al, JAMA Pediatrics, 2018*)

Nicotine is considered bad for young, developing brains. A 2016 report by the U.S. Surgeon General noted that nicotine use in adolescence harms the parts of the brain involved in attention, learning, mood and impulse control ([E-cigarette Use Among Youth and Young Adults: A Report of the Surgeon General](#) [PDF – 8.47MB]. Atlanta, GA: US Department of Health and Human Services, CDC; 2016). Such neurobehavioral effects may be lasting.

We do not know enough about other possible health effects of vaporized tobacco products and flavorings. E-cigarette aerosols have been found to contain at least ten chemicals that are on California's Proposition 65 list of chemicals known to cause cancer, birth defects or other reproductive harm.

Little is known about the possible effects of inhaling aerosolized flavoring chemicals. Most of these flavors are generally considered safe when ingested in food but we simply do not know whether there are risks when such aldehydes and ketones are heated and inhaled. Some of these chemicals cause harm to the lungs of animals, and it seems reckless to permit human consumption of such unstudied products ("*Toxicological Concerns from Inhaled Food Flavorings Found in Electronic (E-) Cigarette Aerosols: A Report from the Environmental Health Investigations Branch*", CDPH, January 2017)

To combat rising child use of tobacco, in 2016 California raised the age for purchasing tobacco products to 21 years (we are currently one of 6 states requiring purchasers to be 21; in other states the age is 18). But clearly the current approach is not working: three-quarters of teenage JUUL users in a recent national survey reported that they had purchased JUUL products at retail stores, over half had gotten it from friends or family, and 6% had purchased JUUL over the internet.

Prompt actions at multiple levels are needed to reverse this addiction trend. U.S Surgeon General Dr. Jerome Adams last month issued a warning about e-cigarettes, with messages to parents, schools, healthcare providers and communities ( <https://e-cigarettes.surgeongeneral.gov/documents/surgeon-generals-advisory-on-e-cigarette-use-among-youth-2018.pdf> ).

The Surgeon General urges parents, teachers and healthcare providers to learn more about flavored electronic nicotine delivery devices and the potential risks, to talk to kids about the dangers and take other appropriate steps to discourage use, including instituting school policies that more effectively deter all forms of tobacco use. Communities are advised to take steps to limit the access of minors to these products.

I endorse the Surgeon General's advice but believe that even stronger action is needed: **We should ban the sale of flavored tobacco products completely**, closing the giant loopholes in the 2009 federal law. In 2018 Mono County

---

*Mono County - Healthy People, Healthy Communities*

Mono County Health Department PO Box 3329, Mammoth Lakes, CA 93546

Mono County Board of Supervisors: Phone (760) 932-5433

District 1: Jennifer Halferty, District 2: Fred Stump, District 3: Bob Gardner,

District 4: John Peters, District 5: Stacy Corless, CAO: Leslie Chapman

became one of at least a dozen California communities to prohibit the sale of flavored tobacco products in unincorporated parts of the county. But the benefits of such bans are diminished by the continued availability of these products in neighboring jurisdictions. I hope that the Town of Mammoth Lakes and neighboring counties recognize that the exploding public health threat of flavored tobacco products justifies making sales illegal, regardless of age.

Tom Boo, MD, FAAFP

Mono County Public Health Officer

437 Old Mammoth Road, Suite Q

Mammoth Lakes, CA 93546

760 924-1828

tboo@mono.ca.gov

---

***Mono County - Healthy People, Healthy Communities***

Mono County Health Department PO Box 3329, Mammoth Lakes, CA 93546

Mono County Board of Supervisors: Phone (760) 932-5433

District 1: Jennifer Halferty, District 2: Fred Stump, District 3: Bob Gardner,

District 4: John Peters, District 5: Stacy Corless, CAO: Leslie Chapman